

# VIRTUAL CURRENCY: USER POINTS OF VIEW

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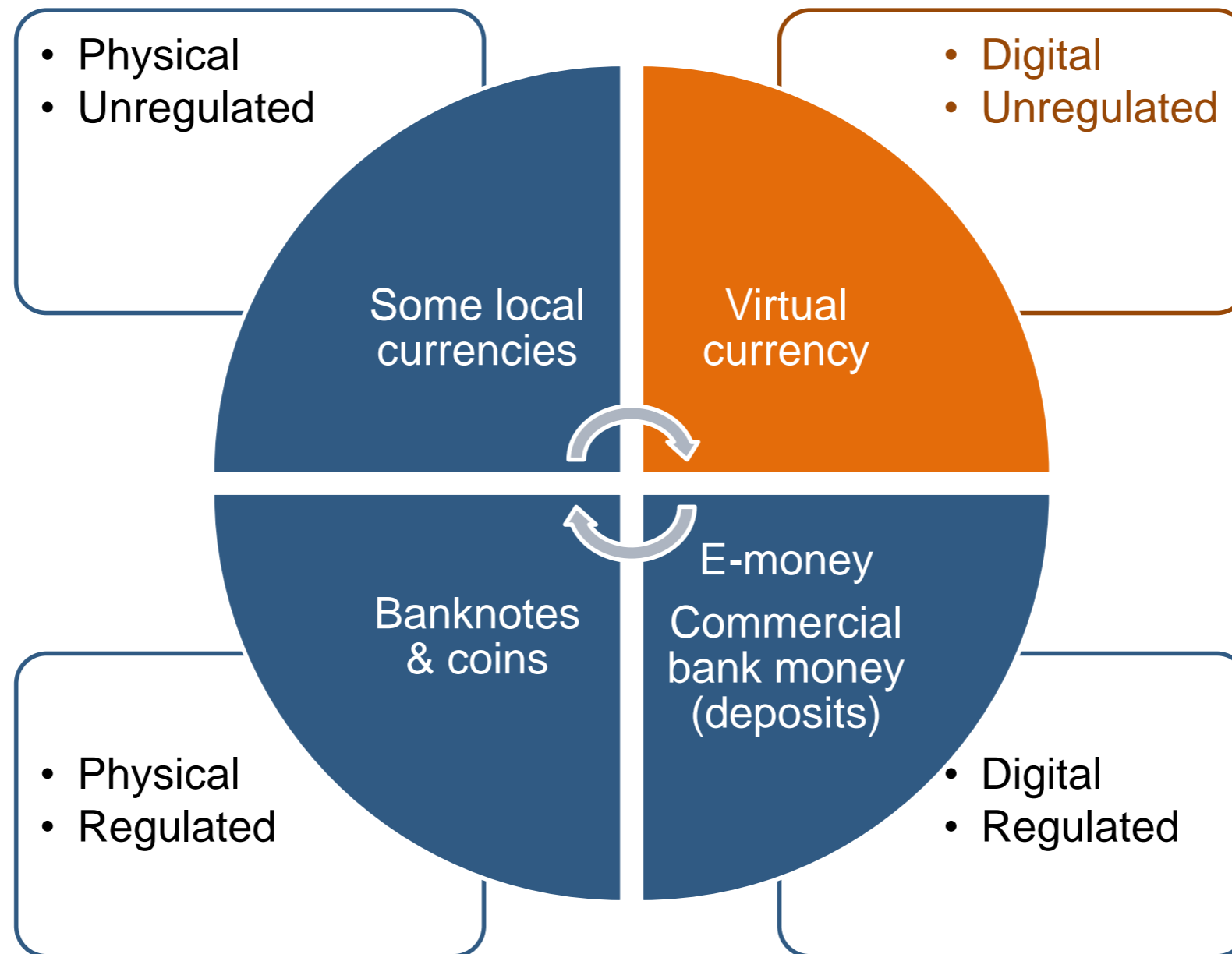
# Disclaimers

- The views expressed here do not necessarily represent the views of the Federal Reserve Bank of Boston or the Federal Reserve System.
- Results from the 2014 and 2015 Survey of Consumer Payment Choice (SCPC) are preliminary and subject to change.

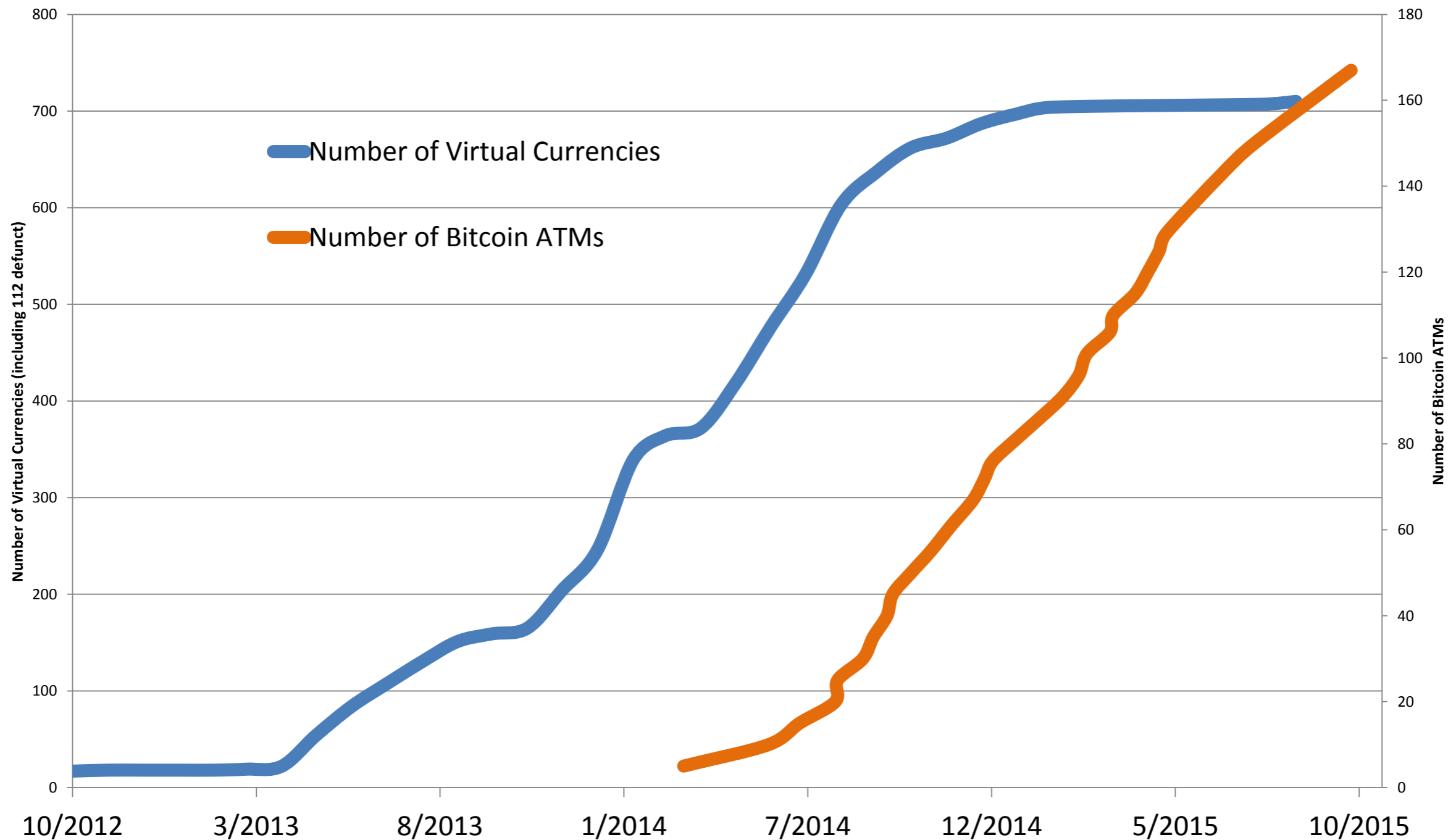
# DATA & DEFINITIONS

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# Money matrix



# 700+ virtual currencies in fall 2015



Source: <http://mapofcoins.com/>, <http://coinatmradar.com/country/226/bitcoin-atm-united-states>

# Virtual currency in context

## Survey of Consumer Payment Choice

- Annual longitudinal panel data (2008–2014)
- ~2,000 U.S. adults (October 2014 and 2015) report on VC
- 600+ virtual currency owners (July 2015)

## Information gathered

- Ownership and use of 10 payment instruments
- Ownership of transaction accounts
- Respondents' assessments of payment instrument characteristics

# Framework for payments behavior

For Bitcoin/VC:

- Awareness and familiarity
- Demand
  - Adoption (yes/no)
  - Amount of holdings
- Use

# AWARENESS & ADOPTION

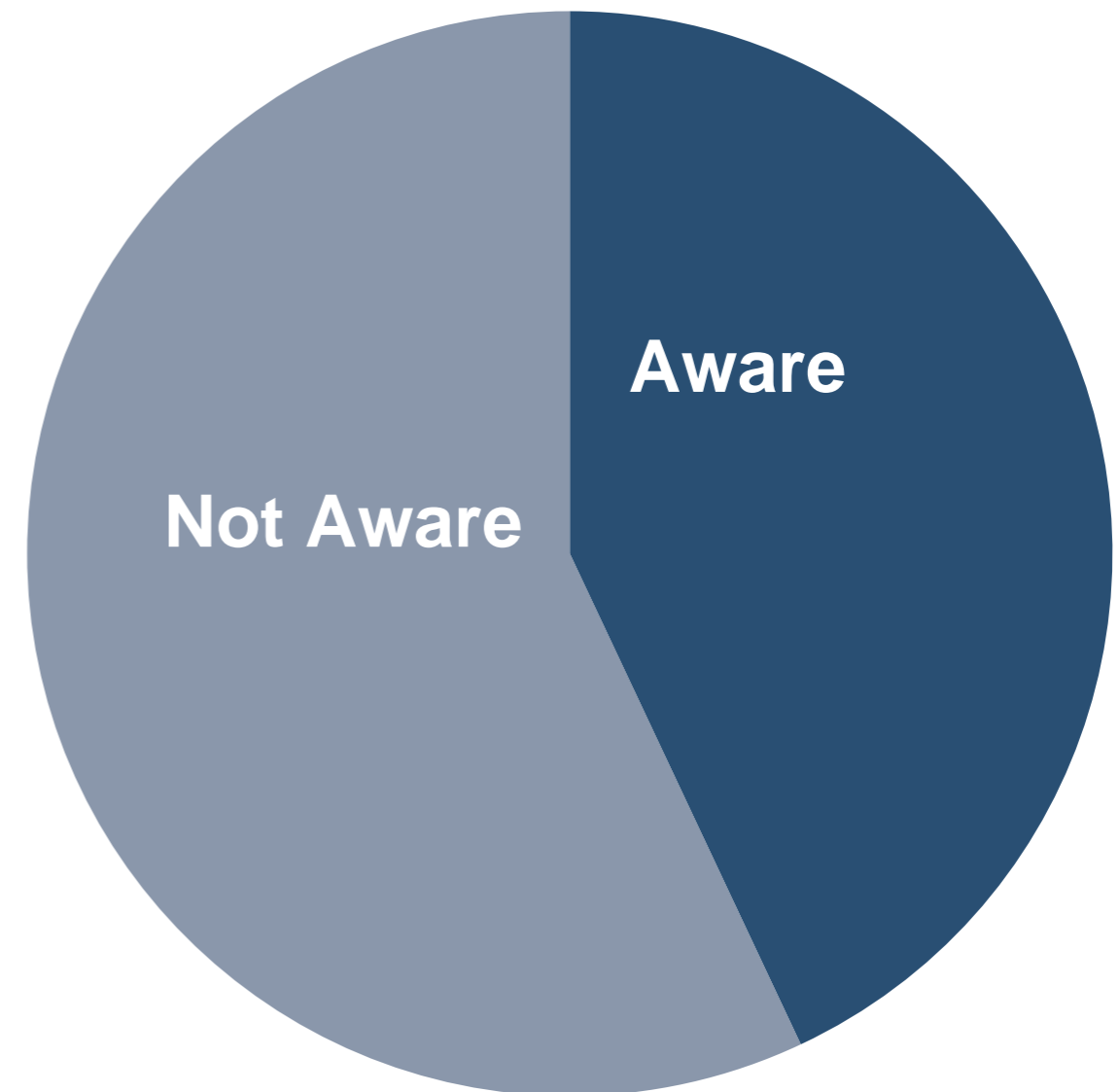
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# 4 in 10 have heard of virtual currency

## Have heard of VC

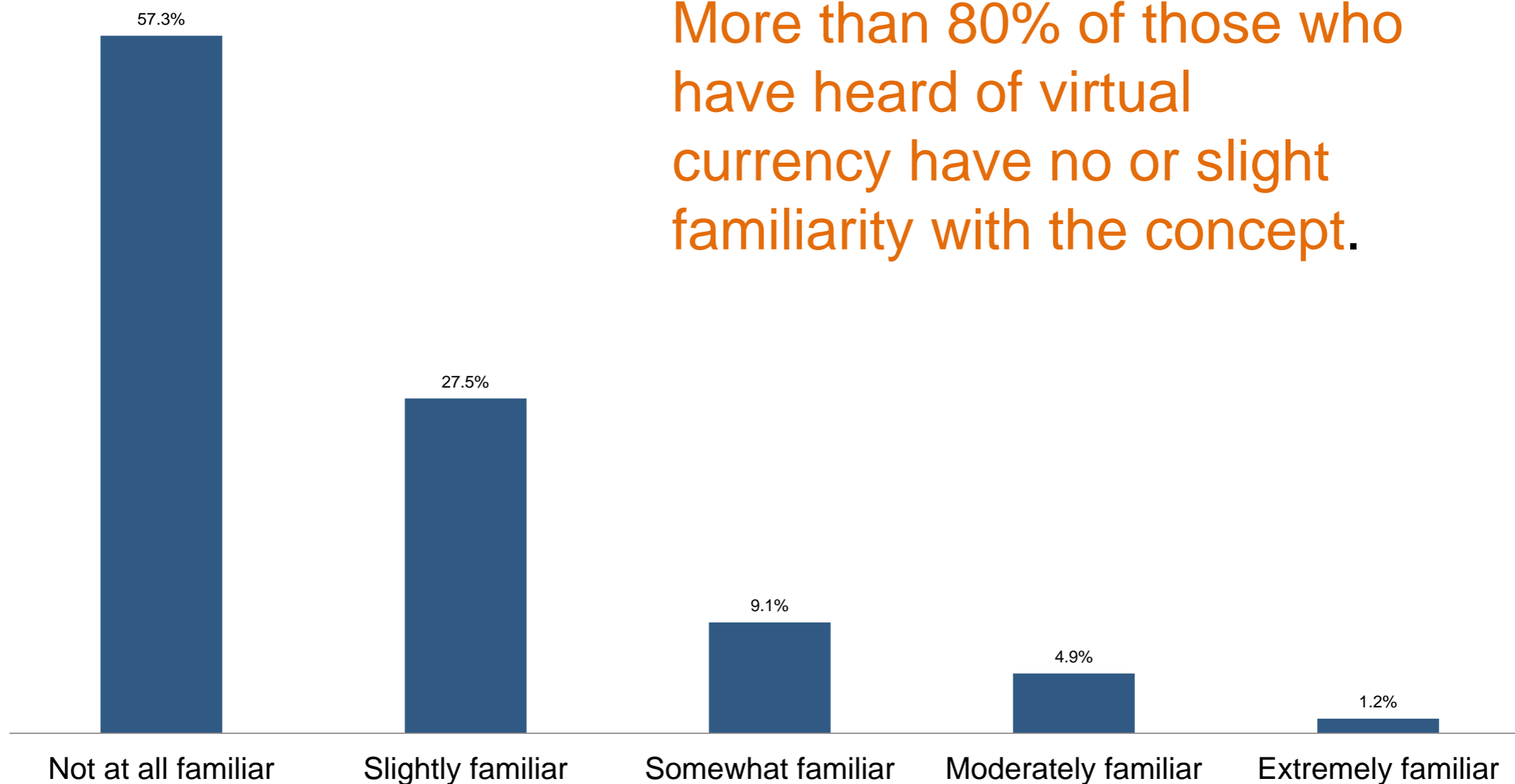
	2014	2015
All types	39.5	43
Bitcoin	39.5	40.6
Other VC	1.1	6.6



Percentage of U.S. consumers  
Survey of Consumer Payment Choice (October 2014 and 2015)  
*Preliminary result, unofficial and subject to revision*

# Among aware, low familiarity

More than 80% of those who have heard of virtual currency have no or slight familiarity with the concept.



Percentage of those aware  
2015 Survey of Consumer Payment Choice (October)  
Preliminary result, unofficial and subject to revision

# Who is aware?

More likely to be:

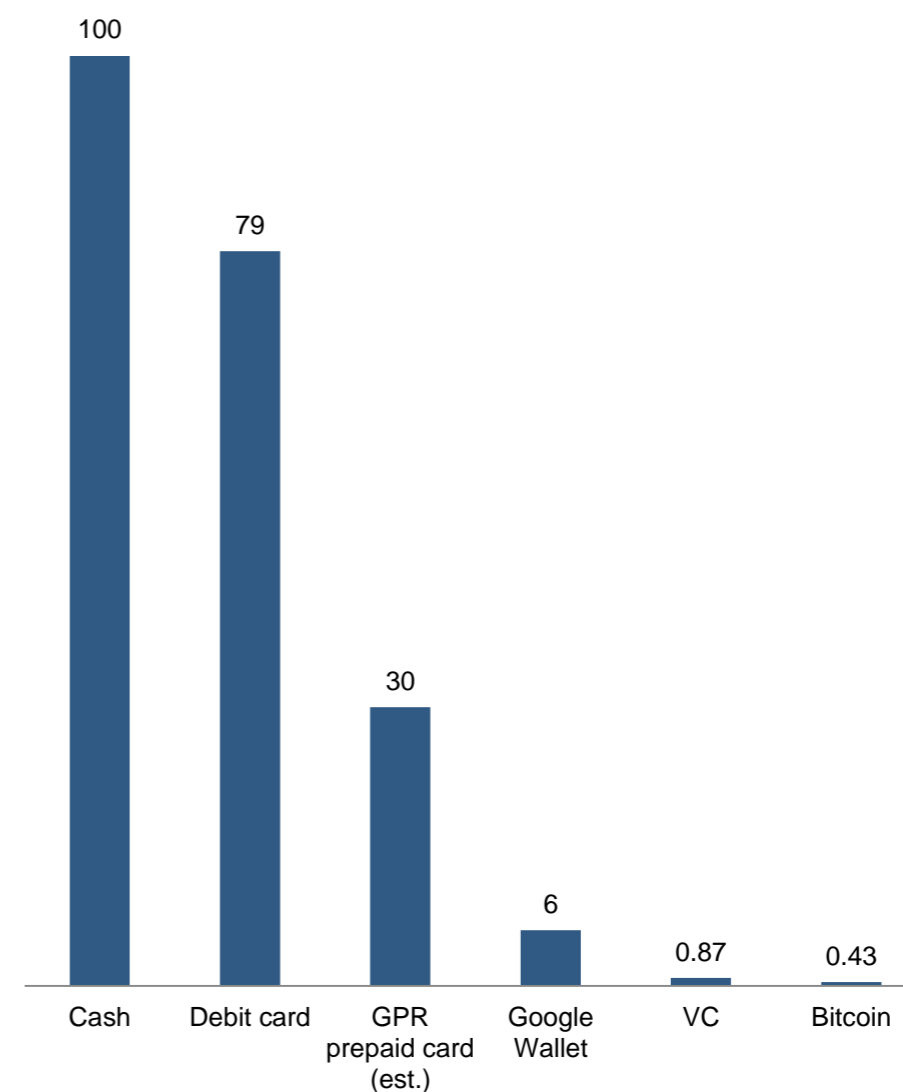
- More educated
- Higher income
- Smaller household size
- White
- Male
- Adopter of greater number of payment instruments

# So far, few adopt virtual currency

## Adopt virtual currency

	2014	2015
All types	0.52	0.87
Bitcoin	0.47	0.43
Other VC	0.16	0.44

## Compared to others



Percentage of U.S. Consumers  
 Survey of Consumer Payment Choice  
 2015 includes July special sample of virtual currency owners  
 Preliminary result, unofficial and subject to revision

# Who adopts?

Among those who are aware, more likely to be:

- Younger
- Less educated
- Male

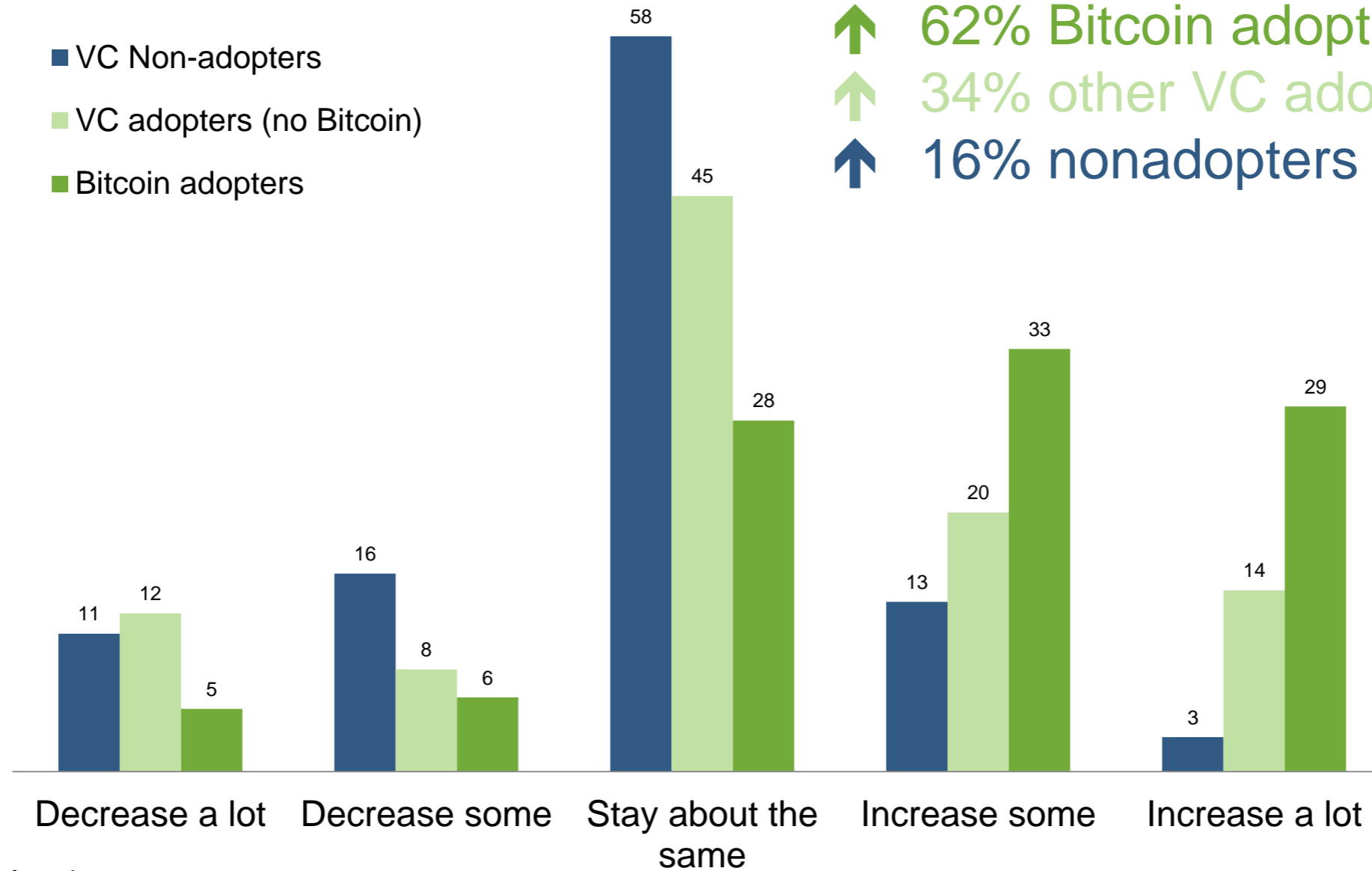
Among those who are aware, more likely to:

- Adopt more payment instruments
  - But less like to have GPR prepaid card
- Have Google Wallet
- Expect value to increase

# Owners expect Bitcoin to appreciate

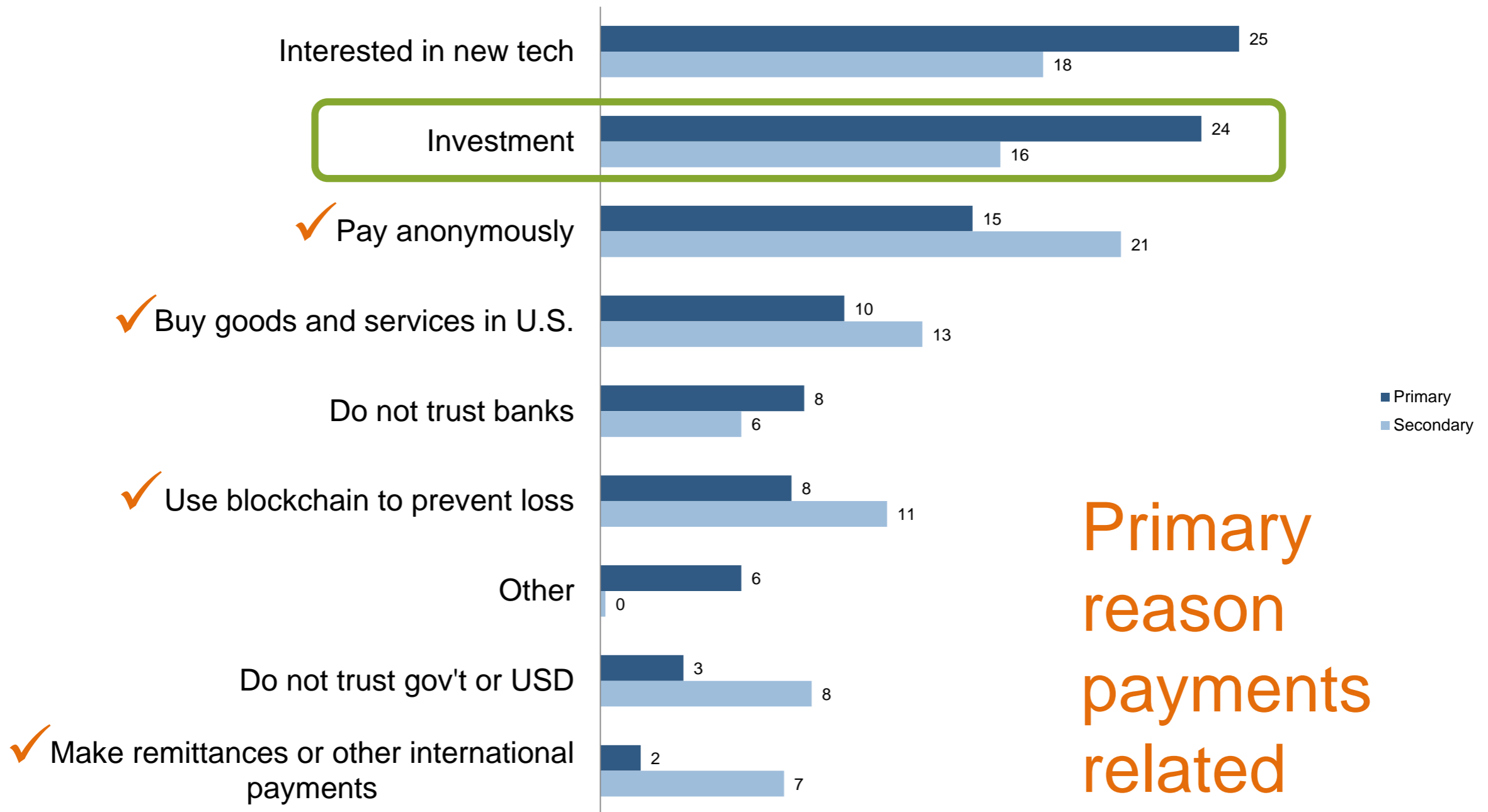
Bitcoin exchange rate expectations  
1 year from now

- ↑ 62% Bitcoin adopters
- ↑ 34% other VC adopters
- ↑ 16% nonadopters



Percentage of each category  
Survey of Consumer Payment Choice (July and October 2015)  
Preliminary result, unofficial and subject to revision

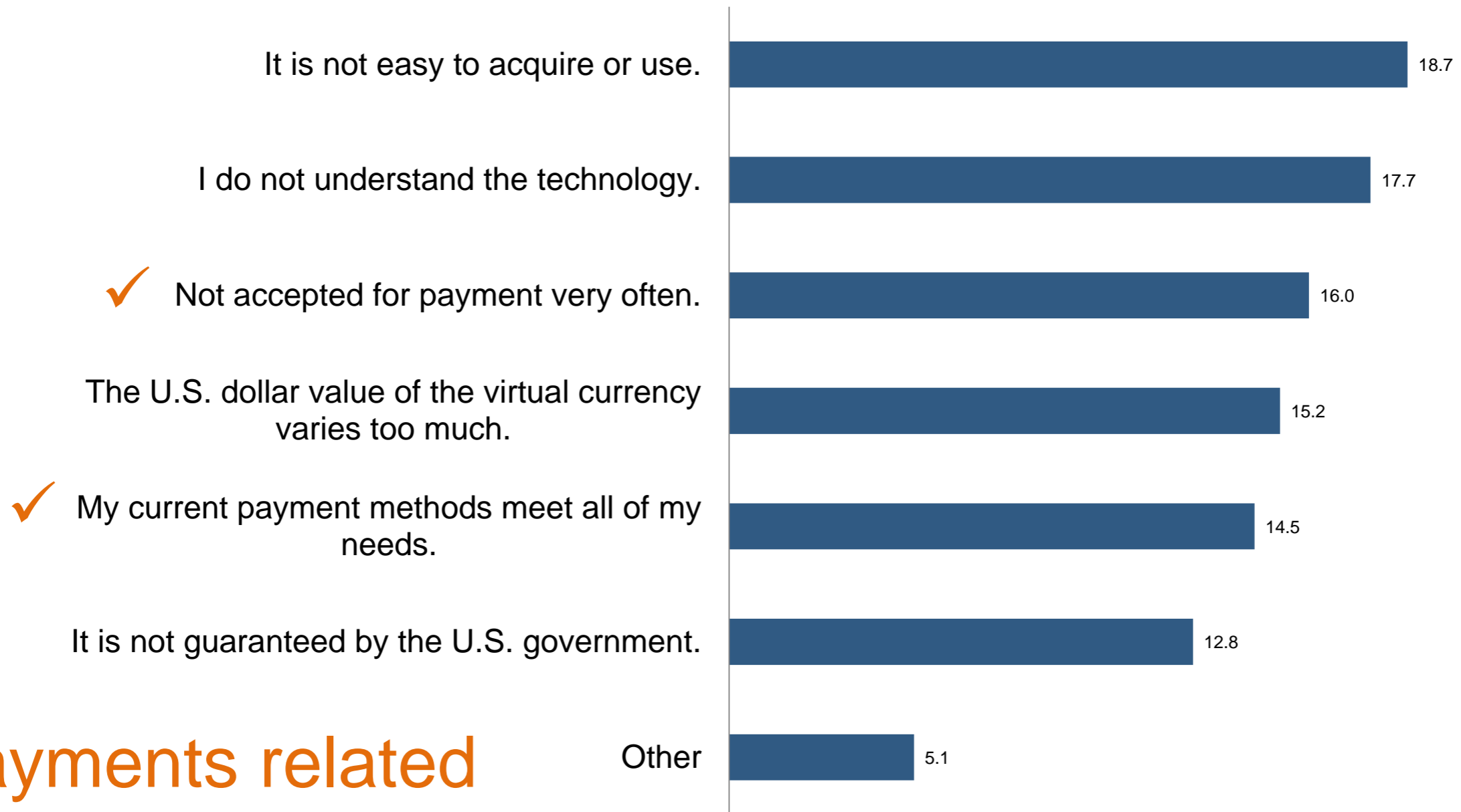
# Why adopt virtual currency?



Primary  
reason  
payments  
related  
35%

Percentage of virtual currency adopters, July 2015  
Survey of Consumer Payment Choice  
Preliminary result, unofficial and subject to revision

# Why not adopt virtual currency?



Payments related reasons 30%

Percentage of virtual currency nonadopters who are aware of virtual currency, October 2015  
Survey of Consumer Payment Choice  
Preliminary result, unofficial and subject to revision



# How much do Bitcoin adopters have?

## Holdings reported by “best estimators”

# of adopters	335
\$ value (mean)	\$6,440
\$ value (median)	\$387

Holdings reported by Bitcoin adopters  
2014 & 2015 Survey of Consumer Payment Choice  
Includes special sample of virtual currency owners  
**Preliminary result, unofficial and subject to revision**

## Data quality

- For owners who used records or for owners whose estimates of value and coins were roughly aligned
- Truncated at 98<sup>th</sup> percentile

# VIRTUAL CURRENCY TO PAY

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# Adopters using virtual currency to pay

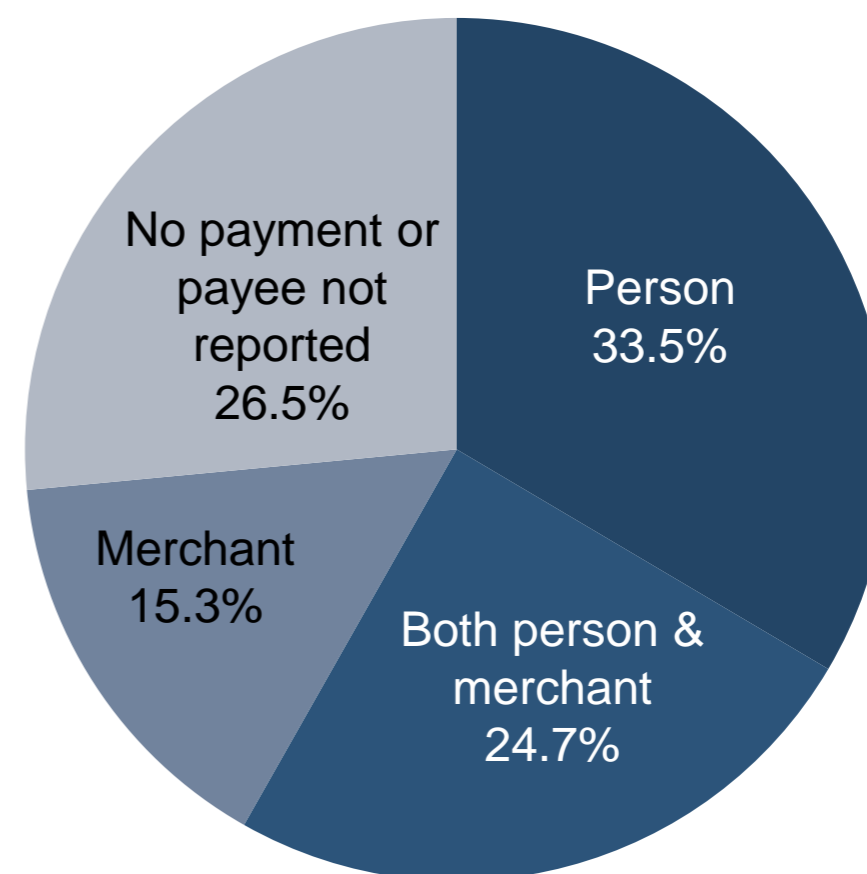
Used to pay, last 12 months

July 2015	
Any	75.1%
Bitcoin	79.9%
Other VC	64.4%

Percentage of adopters  
2015 Survey of Consumer Payment Choice, special sample  
of virtual currency owners

Preliminary result, unofficial and subject to revision

Who was paid?



Among adopters, percentages of payees  
2015 Survey of Consumer Payment Choice, special sample  
of virtual currency owners

Preliminary result, unofficial and subject to revision

# Adopters using virtual currency to pay

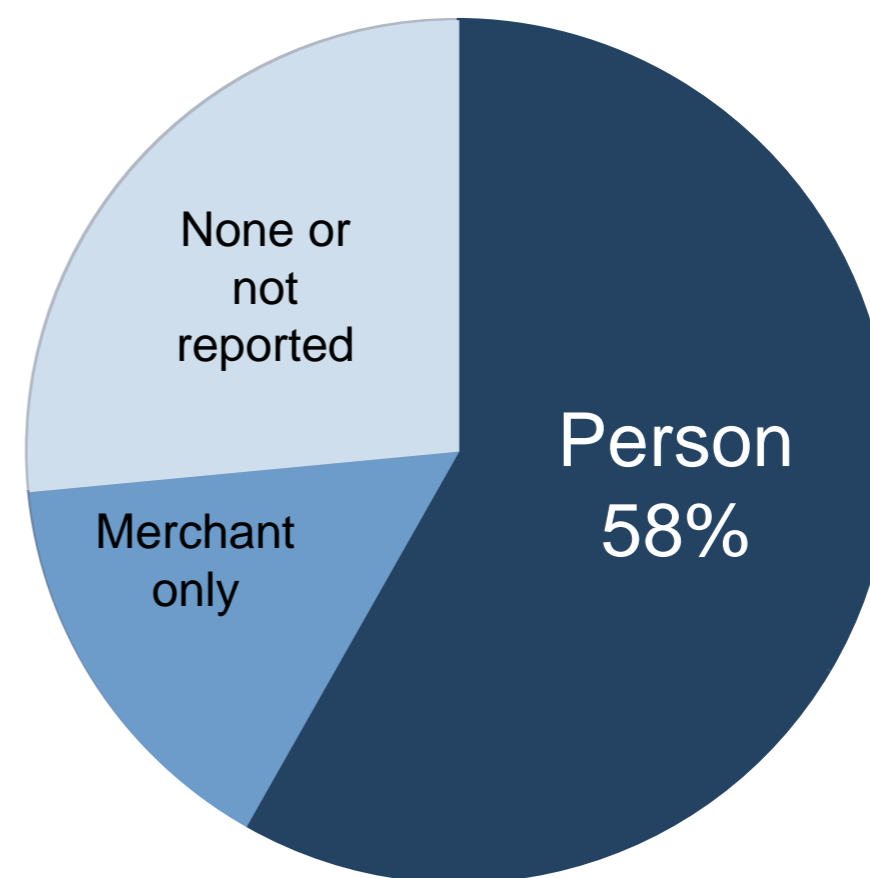
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# So far, limited acceptance for payment



# Merchants accepting Bitcoin: factors



# Preliminary conclusions

1. Awareness is low and growing slowly
  - Among aware, familiarity is low (even among adopters)
2. Adoption is rare
3. Adopters optimistic about price appreciation
4. Many adopters make payments
  - to people (P2P)
  - to merchants (P2B)
5. Survey results interesting but sample is small

# Consumer Payments Research Center

<http://www.bostonfed.org/economic/cprc/index.htm>

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